

217/782-2113

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT -- RENEWAL

PERMITTEE

Astroblast, Inc.  
Attn: Robert A. Gill  
1141 East Green Street  
Franklin Park, Illinois 60131

Application No.: 94030058

I.D. No.: 031414AAM

Applicant's Designation: IEPAAP942

Date Received: November 31, 2005

Subject: Metal Finishing Plant

Date Issued: April 24, 2006

Expiration Date: April 24, 2011

Location: 1141 East Green Street, Franklin Park

This permit is hereby granted to the above-designated Permittee to OPERATE emission source(s) and/or air pollution control equipment consisting of four paint booths with filter panels, bake oven, natural gas-fire space heaters and solvent distillation equipment pursuant to the above-referenced application. This Permit is subject to standard conditions attached hereto and the following special condition(s):

- 1a. This federally enforceable state operating permit is issued:
  - i. To limit the emissions of air pollutants from the source to less than major source thresholds (i.e., 100 tons per year of volatile organic material). As a result the source is excluded from the requirement to obtain a Clean Air Act Permit Program (CAAPP) permit. The maximum emissions of this source, as limited by the conditions of this permit, are described in Attachment A.
  - ii. To limit the emissions of volatile organic material from the source to less than 25 tons/year. As a result, the source is excluded from the requirements of 35 Ill. Adm. Code Part 205, Emission Reduction Market System. The maximum emissions of this source, as limited by the conditions of this permit are described in Attachment A.
- b. Prior to issuance, a draft of this permit has undergone a public notice and comment period.
- c. This permit supersedes all operating permits for this location.
- 2a. Pursuant to 35 Ill. Adm. Code 218.204(j) and (k), no owner or operator of a coating line shall apply at any time any coating in which the VOM content exceeds the following emission limitations for the specified coating. The following emission limitations are expressed in units of VOM per volume of coating (minus water and any compounds which are specifically exempted from the definition of VOM) as applied at each coating applicator, except where noted. Compounds which are specifically exempted from the definition of VOM should be treated as water for the purpose of calculating the "less water" part of the coating composition. The emission limitations are as follows:

i. Miscellaneous Metal Parts and Products Coating:

	<u>lb/gal</u>
Clear Coating	4.3
Extreme Performance Coating/Air Dried	3.5
Extreme Performance Coating/Baked	3.3
Steel pail and Drum Interior Coating	4.3
All Other Coatings/Air Dried	3.3
All Other Coatings/Baked	2.8
Marine Engine Coating/Air Dried	3.5
Marine Engine Coating/Baked/Primer/Topcoat	3.5
Marine Engine Coating/Baked/Corrosion Resistant Basecoat	2.3
Marine Engine Coating/Clear Coating	4.3
Metallic Coating/Air Dried	3.5
Metallic Coating/Baked	3.0

ii. Heavy Off-Highway Vehicle Products Coating:

	<u>lb/gal</u>
Extreme Performance Prime Coat	3.5
Extreme Performance Topcoat (Air Dried)	3.5
Final Repair Coat (Air Dried)	3.5

b. Pursuant to 35 Ill. Adm. Code 218.205, no owner or operator of a coating line subject to the limitations of 35 Ill. Adm. Code 218.204 and complying by means of this Condition shall operate the subject coating line unless the owner or operator has demonstrated compliance with 35 Ill. Adm. Code 218.205(b) or (d) (depending upon the category of coating) through the applicable coating analysis test methods and procedures specified in 35 Ill. Adm. Code 218.105(a) and the recordkeeping and reporting requirements specified in 35 Ill. Adm. Code 218.211(d):

- i. Pursuant to 35 Ill. Adm. Code 218.205(b) (1), no owner or operator of a miscellaneous metal parts and products coating line subject to the limitations of 35 Ill. Adm. Code 218.204(j) shall apply coatings to miscellaneous metal parts or products on the subject coating line unless the requirements in this Condition are met. For each coating line which applies multiple coatings, all of which are subject to the same numerical emission limitation within 35 Ill. Adm. Code 218.204(j) during the same day (e.g., all coatings used on the line are subject to 3.5 lbs/gal), the daily weighted average VOM content shall not exceed the coating VOM content limit corresponding to the category of coating used.
- ii. Pursuant to 35 Ill. Adm. Code 218.205(d), no owner or operator of a heavy off highway vehicle products coating line subject to the limitations of 35 Ill. Adm. Code 218.204(k) shall apply coatings to heavy off highway vehicle products on the subject coating line unless the requirements of this Condition are met. For each coating line which applies multiple coatings, all of which are

subject to the same numerical emission limitation within 35 Ill. Adm. Code 218.204(k), during the same day (e.g., all coatings used on the line are subject to 3.5 lbs/gal), the daily weighted average VOM content shall not exceed the coating VOM content limit corresponding to the category of coating used.

- 3a. Pursuant to 35 Ill. Adm. Code 218.780(a), no owner or operator of a motor vehicle refinishing operation shall coat motor vehicles, mobile equipment, or their parts and components, unless all coatings, except touch-up coatings, never exceed the VOM content limitations in this Condition, expressed as units of VOM per volume of coating applied at each coating applicator, minus water and any compounds that are specifically exempted from the definition of VOM. The VOM content limitations are as follows:

	lb/gal
Pretreatment Wash Primer	6.5
Precoat	5.5
Primer/Primer Surfacer Coating	4.8
Primer Sealer	4.6
Topcoat System or Basecoat/Clearcoat	5.0
Three or Four Stage Topcoat System	5.2
Specialty Coatings	7.0
Anti-Glare/Safety Coating	7.0

- b. Pursuant to 35 Ill. Adm. Code 218.780(b), all coating shall be used according to manufacturer's specifications. If a coating requires the addition of a reducer, hardener, or other additive, in some combination, this addition must not cause the coating, as applied, to exceed the applicable VOM content limitation.
- c. Pursuant to 35 Ill. Adm. Code 218.780(c), specialty coatings shall represent no more than 5 percent, by volume, of all coatings applied at a source on a monthly basis.
- d. Pursuant to 35 Ill. Adm. Code 218.780(d), the equations from 35 Ill. Adm. Code 218.780(d)(1), (d)(2) and (d)(3) shall be used to calculate the VOM content of topcoat systems.
- e. Pursuant to 35 Ill. Adm. Code 218.784, every owner or operator of a motor vehicle refinishing operation, unless the source uses less than 20 gallons of coating per calendar year from all motor vehicle refinishing operations combined, shall:
- i. Coat motor vehicles, mobile equipment, or their parts and components using one of the following coating applicators:
- A. Electrostatic spray equipment calibrated, operated and maintained in accordance with the manufacturer's specifications; or

- B. High Volume Low Pressure (HVLP) spray equipment calibrated, operated and maintained in accordance with the manufacturer's specifications; and
- ii. Clean all coating applicators with a device that:
  - A. Recirculates solvent during the cleaning process [35 Ill. Adm. Code 218.784(b)(1)];
  - B. Collects spent solvent so it is available for disposal or recycling [35 Ill. Adm. Code 218.784(b)(2)]; and
  - C. Minimizes evaporation of solvents during cleaning, rinsing, draining, and storage [35 Ill. Adm. Code 218.784(b)(3)].
- f. Pursuant to 35 Ill. Adm. Code 218.786, every owner or operator of a motor vehicle refinishing operation only shall use surface preparation materials that never exceed the following VOM content limitations for the specified substrate:

	lb/gal
Plastic Parts	6.5
Other Substrates	1.4
- 4a. Pursuant to 35 Ill. Adm. Code 218.787(a), every owner or operator of a motor vehicle refinishing operation shall ensure that fresh and spent solvent, cloth or paper used to apply solvents for surface preparation or cleanup, waste paint, and sludge are stored in closed containers.
- b. Pursuant to 35 Ill. Adm. Code 218.787(b), every owner or operator of a motor vehicle refinishing operation that is exempt from the equipment specifications in 35 Ill. Adm. Code 218.784 because it uses less than 20 gallons of coating per year shall direct solvent used to clean coating applicator equipment and paint lines into a container for proper disposal or recycling.
- 5a. Total combined emissions of VOM from painting and clean-up operations shall not exceed the following limits:

2.5 tons/month; 24.5 tons/year.
- b. The emissions of HAPs as listed in Section 112(b) of the Clean Air Act shall not equal or exceed 10 tons per year of any single HAP or 25 tons per year of any combination of such HAPs, or such lesser quantity as USEPA may establish by rule which would require the Permittee to obtain a Clean Air Act Permit Program permit from the Illinois EPA. As a result of this condition, this permit is issued based on the emissions of any HAP from this source not triggering the requirement to obtain a Clean Air Act Permit Program permit from the Illinois EPA.

- c. The emissions of VOM and (HAP) shall be determined from the following equation on a monthly basis:

$$\sum (P_i \times C_i) + \sum (S_j \times C_j)$$

Where:

$P_i$  - Paint usage (gallons/month);

$C_i$  - VOM and (HAP) content of the paint (lbs/gallon);

$S_j$  - Solvent usage (gallons/month); and

$C_j$  - VOM and (HAP) content of the solvent (lbs/gallon).

- d. These limits define the potential emissions of the VOM and HAPs and are based on the actual emissions determined from maximum production capacity.
- e. Compliance with annual limits shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months.
6. No person shall cause or allow any visible emissions of particulate matter from any process, including any material handling or storage activity beyond the property line of the emission source, pursuant to 35 Ill. Adm. Code 212.301.
7. In the event that the operation of this source results in an odor nuisance, the Permittee shall take appropriate and necessary actions to minimize odors, including but not limited to, changes in raw material or installation of controls, in order to eliminate the nuisance.
- 8a. Pursuant to 35 Ill. Adm. Code 218.788(a), upon request by the Illinois EPA, the owner or operator of a motor vehicle refinishing operation shall, at its own expense, conduct tests to demonstrate compliance with 35 Ill. Adm. Code 218.780 or 218.786, in accordance with the applicable test methods and procedures specified in 35 Ill. Adm. Code 218.105 and shall:
- i. Notify the Illinois EPA 30 days prior to conducting such tests; and
  - ii. Submit all test results to the Illinois EPA within 45 days after conducting the requisite tests.
- b. Pursuant to 35 Ill. Adm. Code 218.788(b), for purposes of 35 Ill. Adm. Code 218.788, surface preparation materials shall be treated as coatings.

9. The Permittee shall maintain daily records for each paint booth of the following items:
  - a. The name and identification number of each coating as applied;
- 10a. Pursuant to 35 Ill. Adm. Code 218.211(d)(2), the owner or operator of a subject coating line shall collect and record all of the following information each day for each coating line and maintain the information at the source for a period of three years:
  - i. The name and identification number of each coating as applied on each coating line.
  - ii. The weight of VOM per volume and the volume of each coating (minus water and any compounds which are specifically exempted from the definition of VOM) as applied each day on each coating line.
  - iii. The daily weighted average VOM content of all coatings as applied on each coating line as defined in 35 Ill. Adm. Code 218.104.
- b. Pursuant to 35 Ill. Adm. Code 218.790, every owner or operator of a motor vehicle refinishing operation shall maintain the following records for the most recent consecutive 3 years. Such records shall be made available to the Illinois EPA immediately upon request:
  - i. The name and manufacturer of each coating and surface preparation product used at the source each month;
  - ii. The volume of each category of coating, as set forth in 35 Ill. Adm. Code 218.780, purchased by the source each month;
  - iii. The coating mixing instructions, as stated on the container, in literature supplied with the coating, or otherwise specified by the manufacturer, for each coating purchased by the source each month;
  - iv. The VOM content, expressed as weight of VOM per volume of coating, minus water and any compounds that are specifically exempted from the definition of VOM, recorded on a monthly basis for:
    - A. Each coating as purchased, if the coating is not mixed with any additives prior to application on the substrate; or
    - B. Each coating after mixing according to manufacturer's instructions as collected pursuant to Condition 9(b)(iii);
  - v. The weighted average VOM content of the coating, as specified in 35 Ill. Adm. Code 218.780(d)(1), (d)(2) or (d)(3), for each basecoat/clearcoat, and three or four stage coating system purchased by the source, recorded on a monthly basis;

- vi. The total monthly volume of all specialty coatings purchased and the percentage specialty coatings comprise in the aggregate of all coatings purchased by the source each month;
  - vii. The volume of each category of surface preparation material, as set forth in 35 Ill. Adm. Code 218.786, purchased by the source each month; and
  - viii. The VOM content, expressed as weight of VOM per volume of material, including water, of each surface preparation material purchased by the source, recorded on a monthly basis.
- c. The Permittee shall maintain monthly records of the following items:
- i. The name and identification number of each coating used;
  - ii. The usage (gallons/month), density (lbs/gallon), VOM and HAP content of each coating (weight percent or lbs/gallon);
  - iii. The name and identification number of solvents used;
  - iv. The usage (gallons/month), density (lbs/gallon), VOM and HAP content of each solvent (weight percent or lb/gallon); and
  - v. The amount of natural gas combusted (mscft<sup>3</sup>/month); and
  - vi. The emission of NO<sub>x</sub>, CO, VOM and HAP for current month and total running for last 12 months with supporting calculations (tons/month, tons/year).
- d. All records and logs required by this permit shall be retained at a readily accessible location at the source for at least five years from the date of entry and shall be made available for inspection and copying by the Illinois EPA and USEPA upon request. Any records retained in an electronic format (e.g., computer) shall be capable of being retrieved and printed on paper during normal source office hours so as to be able to respond to an Illinois EPA request for records during the course of a source inspection.
- 11a. If there is an exceedance of the requirements of this permit as determined by the records required by this permit, the Permittee shall submit a report to the Illinois EPA's Compliance Section in Springfield, Illinois within 30 days after the exceedance. The report shall include the emissions released in accordance with the recordkeeping requirements, a copy of the relevant records, and a description of the exceedances or violation and efforts to reduce emissions and future occurrences.
- b. Pursuant to 35 Ill. Adm. Code 218.211(d)(3), the owner or operator of a subject coating line shall notify the Illinois EPA in the following instances:

- i. Any record showing violation of 35 Ill. Adm. Code 218.205 shall be reported by sending a copy of such record to the Illinois EPA within 30 days following the occurrence of the violation.
  - ii. At least 30 calendar days before changing the method of compliance with this 35 Ill. Adm. Code 218 Subpart F from 35 Ill. Adm. Code 218.205 to 35 Ill. Adm. Code 218.204 or 35 Ill. Adm. Code 218.207, the owner or operator shall comply with all requirements of 35 Ill. Adm. Code 218.211(c)(1) or (e)(1), respectively. Upon changing the method of compliance with 35 Ill. Adm. Code 218 Subpart F from 35 Ill. Adm. Code 218.205 to 35 Ill. Adm. Code 218.204 or 35 Ill. Adm. Code 218.207, the owner or operator shall comply with all requirements of 35 Ill. Adm. Code 218.211(c) or (e), respectively.
- c. Pursuant to 35 Ill. Adm. Code 218.782(a), every owner or operator of a motor vehicle refinishing operation shall register with the Illinois EPA on or before the date specified in 35 Ill. Adm. Code 218.791 and re-register no later than 45 days following the end of each subsequent calendar year. The following information shall be included in this registration:
- i. The name and address of the source, and the name and telephone number of the person responsible for submitting the registration information;
  - ii. A description of all coating operations of motor vehicles, mobile equipment, or their parts or components, and all associated surface preparation operations at the source;
  - iii. A description of all coating applicators used at the source to comply with 35 Ill. Adm. Code 218.784(a), if applicable;
  - iv. A description of all cleanup operations at the source, including equipment used to comply with 35 Ill. Adm. Code 218.784(b), if applicable;
  - v. A description of all work practices at the source used to comply with 35 Ill. Adm. Code 218.787;
  - vi. If a source claims to be exempt from the equipment requirements in 35 Ill. Adm. Code 218.784 because it uses less than 20 gallons of coating per year, the owner's or operator's certification that the annual usage is below this level;
  - vii. A written declaration stating whether the source is complying with this 35 Ill. Adm. Code 218 Subpart HH by using coatings that comply with the applicable VOM content limits in 35 Ill. Adm. Code 218.780 or by control equipment as specified in 35 Ill. Adm. Code 218.782; and



- viii. A description of any control devices used to comply with 35 Ill. Adm. Code 218.782 and the date(s) the device was installed and became operational.
- d. Pursuant to 35 Ill. Adm. Code 218.792(b), at least 30 calendar days before changing the method of compliance to or from 35 Ill. Adm. Code 218.780 and 218.782, the owner or operator of a motor vehicle refinishing operation shall notify the Illinois EPA and certify that the source is in compliance with the applicable requirements for the new method of compliance.
12. Two (2) copies of required reports and notifications shall be sent to:
- Illinois Environmental Protection Agency  
Division of Air Pollution Control  
Compliance Section (#40)  
P.O. Box 19276  
Springfield, Illinois 62794-9276
- and one (1) copy shall be sent to the Illinois EPA's regional office at the following address unless otherwise indicated:

Illinois Environmental Protection Agency  
Division of Air Pollution Control  
9511 West Harrison  
Des Plaines, Illinois 60016

It should be noted that the sandblasting operations are exempt from state permit requirements pursuant to 35 Ill. Adm. Code 201.146 (fff), respectively.

If you have any questions on this, please call Dwayne Booker at 217/782-2113.

Donald E. Sutton, P.E.  
Manager, Permit Section  
Division of Air Pollution Control

DES:DLB:psj

cc: Region 1

Attachment A - Emissions Summary

This attachment provides a summary of the maximum emission from the Metal Finishing Plant operating in compliance with the requirements of this federally enforceable permit. In preparing this summary, the Illinois EPA used the annual operating scenario which results in maximum emissions from such a plant. This is assumption of 100% evaporation rate of all VOM containing materials. The resulting maximum emissions are below the levels (e.g., 100 tons per year of VOM, 10 tons per year for a single HAP, and 25 tons per year for totaled HAP) at which this source would be considered a major source for purposes of the Clean Air Act Permit Program. Actual emissions from this source will be less than predicted in this summary to the extent that material is handled, and control measures are more effective than required in this permit.

Emissions of VOM and HAPS: From the Coating Operations

<u>Operation</u>	<u>VOM</u>	<u>Emissions (Tons/Year)</u>	
		<u>Individual HAPs</u>	<u>Total HAPs</u>
Painting and Clean-Up	24.5		
Totals	<u>24.5</u>	<u>&lt; 10</u>	<u>&lt; 25</u>

DLB:psj